



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0812; Directorate Identifier 2013-CE-023-AD]

RIN 2120-AA64

Airworthiness Directives; Diamond Aircraft Industries Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Diamond Aircraft Industries Model DA 40 and DA 40 F Airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as fatigue strength found in the aft main spar does not ensure unlimited lifetime structural integrity. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,

West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE.,
Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except
Federal holidays.

For service information identified in this proposed AD, contact Diamond Aircraft
Industries GmbH, N.A. Otto-Str.5, A-2700 Wiener Neustadt, Austria; telephone: +43
2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet:
<http://www.diamondaircraft.com/contact/technical.php>. You may review copies of the
referenced service information at the FAA, Small Airplane Directorate, 901 Locust,
Kansas City, Missouri 64106. For information on the availability of this material at the
FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>;
or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday
through Friday, except Federal holidays. The AD docket contains this proposed AD, the
regulatory evaluation, any comments received, and other information. The street address
for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section.

Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer,
FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106;
telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this
proposed AD. Send your comments to an address listed under the ADDRESSES section.
Include “Docket No. FAA-2013-0812; Directorate Identifier 2013-CE-023-AD” at the
beginning of your comments. We specifically invite comments on the overall regulatory,
economic, environmental, and energy aspects of this proposed AD. We will consider all

comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No.: 2013-0145, dated July 15, 2013 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Structural fatigue testing of the DA 40 aeroplane carried out for an extension of the Major Structural Inspection (MSI) interval has shown that the fatigue strength of the aft main spar in the cabin area does not ensure unlimited lifetime.

This condition, if not corrected, could adversely affect the structural integrity of the aeroplane.

Diamond Aircraft Industries (DAI) issued Mandatory Service Bulletin (MSB) 40-074 / MSB D4-094 / MSB F4-028, including Work Instruction (WI) WI-MSB 40-074 / WI-MSB D4-094 / WI-MSB F4-028 (published as a single document), providing instructions to reinforce the aft main spar in the cabin area.

For the reasons described above, this AD requires modification of the aft main spar in the cabin area.

Note: Aeroplanes with modified aft main spar are eligible for an increased MSI threshold of 6000 flight hours (FH) since first flight of the aeroplane and increased MSI intervals not to exceed 4000 FH thereafter.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Diamond Aircraft Industries GmbH has issued Mandatory Service Bulletin MSB 40-074, MSB D4-094, and MSB F4-028 (co-published as a single document), dated May 10, 2013; and Diamond Aircraft Industries GmbH Work Instructions WI-MSB 40-074, WI-MSB D4-094, and WI-MSB F4-028, (co-published as a single document), dated May 10, 2013. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 747 products of U.S. registry. We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$100 per product.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$455,670, or \$610 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII,

Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

Diamond Aircraft Industries: Docket No. FAA-2013-0812; Directorate Identifier 2013-CE-023-AD.

(a) Comments Due Date

We must receive comments by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Diamond Aircraft Industries Model DA 40 airplanes, serial numbers 40.006 through 40.009, 40.011 through 40.1071, and 40.1073 through 40.1077; and Model DA 40 F airplanes, serial numbers 40.FC001 through 40.FC029; certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 57: Wings.

(e) Reason

This AD was prompted from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as fatigue strength found in the aft main spar does not ensure unlimited lifetime structural integrity. We are issuing this proposed AD to modify the aft main spar in the cabin area to ensure the structural integrity of the airplane.

(f) Actions and Compliance

Unless already done, at or before the next Major Structural Inspection (MSI) after the effective date of this AD or within the next 114 months after the effective date of this AD, whichever occurs first, modify the aft main spar in the cabin area following the INSTRUCTIONS section of Diamond Aircraft Industries GmbH Work Instructions WI-MSB 40-074, WI-MSB D4-094, and WI-MSB F4-028 (co-published as a single document), dated May 10, 2013, as specified in Diamond Aircraft Industries GmbH Mandatory Service Bulletins (MSB) 40-074, D4-094, and F4-028 (co-published as a single document), dated May 10, 2013.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, EASA AD No.: 2013-0145, dated July 15, 2013, for more information. You may examine the AD on the Internet at <http://www.regulations.gov> by searching and locating it in Docket No. FAA-2013-0812. For service information related to this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Str.5, A-2700 Wiener Neustadt, Austria; telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamondaircraft.com/contact/technical.php>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on September 11, 2013.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.